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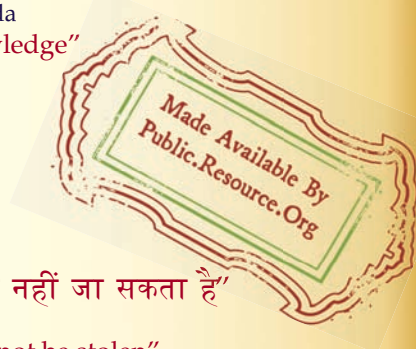
IS 3974 (1967): Bifurcated Rivets for General Purposes [PGD 31: Bolts, Nuts and Fasteners Accessories]



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“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

**SPECIFICATION FOR BIFURCATED
RIVETS FOR GENERAL PURPOSES**

(Third Reprint FEBRUARY 1992)

UDC 621.884

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**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002**

Indian Standard

SPECIFICATION FOR BIFURCATED RIVETS FOR GENERAL PURPOSES

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Indian Standard

SPECIFICATION FOR BIFURCATED RIVETS FOR GENERAL PURPOSES

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 17 January 1967, after the draft finalized by the Screw Threads and Fasteners Sectional Committee had been approved by the Mechanical Engineering Division Council.

0.2 Bifurcated rivets are extensively used in large quantities to fasten many types of materials such as wood, plastics and leather. The bifurcation is formed by sawing or punching out the slot from a solid rivet.

0.3 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard prescribes the requirements for two types of bifurcated rivets given below:

- a) Oval-head bifurcated rivet, and
- b) 120°-countersunk head bifurcated rivet.

2. MATERIAL

2.1 The material for steel bifurcated rivets shall conform to C15 of Schedule II of IS : 1570-1961†. The percentage each of sulphur and phosphorus in the steel shall not exceed 0.05.

2.1.1 Rivets made from steel may be electroplated.

2.2 The material for aluminium and aluminium alloy bifurcated rivets shall conform to IS : 740-1966‡.

2.3 The material for brass bifurcated rivets shall conform to IS : 320-1962§.

*Rules for rounding off numerical values (*revised*).

†Schedules for wrought steels for general engineering purposes.

‡Specification for wrought aluminium and aluminium alloys, rivet stock (for general engineering purposes) (*revised*).

§Specification for high tensile brass rods and sections (*revised*).

3. DIMENSIONS

3.1 The dimensions for bifurcated rivets shall be as given in Tables 1 and 2.

4. WORKMANSHIP AND FINISH

4.1 The bifurcated rivets shall be well finished and free from burrs and harmful defects. The heads and the bifurcation shall be well formed.

5. DESIGNATION

5.1 The bifurcated rivets conforming to this standard shall be designated by the type, nominal size, length, number of this standard and the material.

5.1.1 An oval-head bifurcated rivet of nominal size 4 mm, length 12 mm, conforming to this standard and made from steel, shall be designated as:

Oval Hd Bifurcated Rivet 4 × 12 IS : 3974 Steel.

5.1.2 A 120°-countersunk head bifurcated rivet of nominal size 3 mm, length 10 mm, conforming to this standard and made from aluminium shall be designated as:

120° CSK Hd Bifurcated Rivet 3 × 10 IS : 3974 Aluminium.

6. PRESERVATION AND PACKING

6.1 Preservation — Unless the purchaser has specified a particular treatment at the time of enquiry or placing the order, the bifurcated rivets shall be supplied in a well cleaned condition and suitably protected against corrosion.

6.2 Packing — The bifurcated rivets shall be wrapped in water-proof paper packets or cartons, the weight of the rivets in the packet or carton being 0.5 kg. Fifty such packets or cartons shall be suitably packed in wooden cases. Each packet, carton or wooden case shall contain rivets of one size and type only.

7. SAMPLING

7.1 For the purpose of conducting tests for conformity of the bifurcated rivets to this standard, the sampling of bifurcated rivets shall be in accordance with IS : 2614-1964*.

8. MARKING

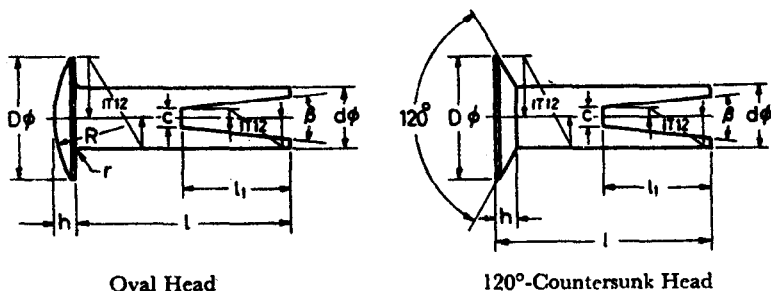
8.1 Such marks as may be specified by the purchaser shall be stamped (raised or sunk) during the process of manufacture on the heads of bifurcated rivets.

*Methods for sampling of fasteners. (Since revised).

TABLE 1 DIMENSIONS FOR BIFURCATED RIVETS

(Clause 3.1)

All dimensions in millimetres.



NOMINAL SIZE

	2	2.5	3	3.5	4	4.5	5	5.5	6
d (js12)	2	2.5	3	3.5	4	4.5	5	5.5	6
D (js13)	4	5	6	7	8	9	9.5	10	10
R Nom	4	5	5.5	7	8	8.3	8.5	8.5	8.5
h (+IT7)	0.6	0.7	0.85	1.0	1.2	1.3	1.3	1.3	1.3
r	0.3	0.4	0.45	0.5	0.6	0.7	0.75	0.8	0.9
l (+IT9)									
3	×	×	×	—	—	—	—	—	—
4	×	×	×	×	×	—	—	—	—
5	×	×	×	×	×	×	×	—	—
6	×	×	×	×	×	×	×	×	×
7	×	×	×	×	×	×	×	×	×
8	×	×	×	×	×	×	×	×	×
9	×	×	×	×	×	×	×	×	×
10	×	×	×	×	×	×	×	×	×
12	×	×	×	×	×	×	×	×	×
14	×	×	×	×	×	×	×	×	×
16	—	×	×	×	×	×	×	×	×
18	—	—	×	×	×	×	×	×	×
20	—	—	×	×	×	×	×	×	×
22	—	—	×	×	×	×	×	×	×
24	—	—	—	×	×	×	×	×	×
26	—	—	—	—	—	×	×	×	×
28	—	—	—	—	—	×	×	×	×
30	—	—	—	—	—	×	×	×	×
32	—	—	—	—	—	—	—	×	×

NOTE — For dimensions of l_1 , c and β , see Table 2.

TABLE 2 BIFURCATION DIMENSIONS FOR RIVETS
(Clause 3.1)

All dimensions in millimetres.

<i>d</i>	LENGTH RANGE		<i>l</i> ₁	<i>c</i>	β°
	Above	Up to and including			
2		4	2.5	0.95	8½
	4	6	4	0.95	8½
	6	9	5.5	0.95	5
	9	14	7	0.95	5
2.5		4	2.5	0.95	12
	4	6	4	0.95	8½
	6	9	5.5	0.95	5
	9	16	7	0.95	5
3		4	2.5	1.2	12
	4	6	4	1.2	12
	6	9	5.5	0.95	8½
	9	16	7	0.95	8½
	16	22	12.5	0.95	5
3.5		4	2.5	1.2	12
	4	6	4	1.2	12
	6	9	5.5	1.2	8½
	9	16	7	0.95	8½
	16	24	12.5	0.95	5
4		4	2.5	1.8	12
	4	6	4	1.8	12
	6	9	5.5	1.2	12
	9	16	7	1.2	12
	16	26	12.5	1.2	8½
4.5		6	4	1.8	12
	6	9	5.5	1.8	12
	9	16	7	1.2	12
	16	30	12.5	1.2	8½
5		6	4	1.8	12
	6	9	5.5	1.8	12
	9	16	7	1.8	12
	16	30	12.5	1.2	8½
5.5		6	4	1.8	12
	6	9	5.5	1.8	12
	9	16	7	1.8	12
	16	32	12.5	1.2	12
6		6	4	1.8	12
	6	9	5.5	1.8	12
	9	16	7	1.8	12
	16	32	12.5	1.2	12

8.1.1 The bifurcated rivets may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

9. GENERAL SUPPLY CONDITIONS

9.1 The general requirements for the supply of bifurcated rivets shall be in accordance with IS : 1387-1959*.

*General requirements for the supply of metals and metal products.

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